FIG. 1 (PRIOR ART)

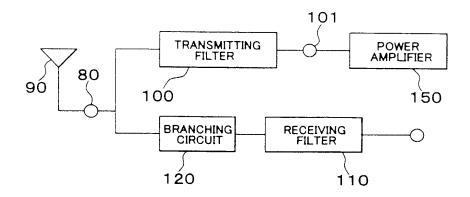
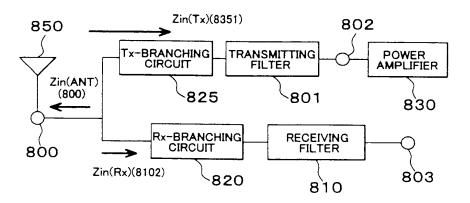


FIG. 2 (1st EMBODIMENT)



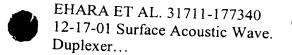
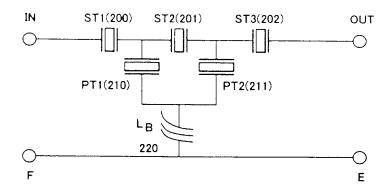
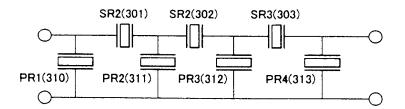
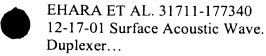


FIG. 3



F I G. 4





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FIG. 5

WIDE BAND CDMA

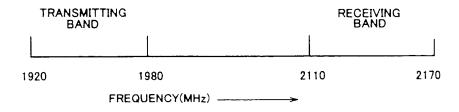
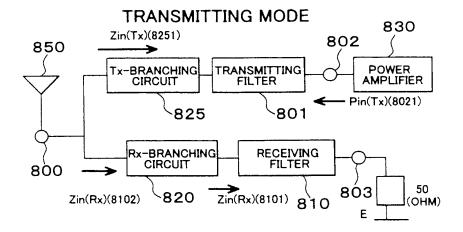


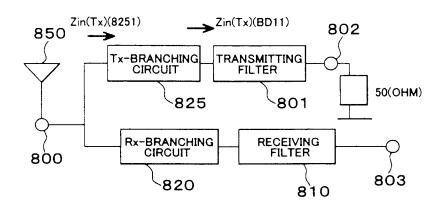
FIG. 6



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F I G. 7

RECEIVING MODE





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F I G. 8

CONSTRUCTION OF TRANSMITTING FILTER

	(0S)1QI	IDT(S1)	IDT(S2)	IDT(P0)	IDT(S0) IDT(S1) IDT(S2) IDT(P0) IDT(P1)	POLARIZED L
f00(MHz)	2216	2216	2216	2124	2124	0.65(nH)
LPR	0.55	0.55	0.55	0.55	0.55	
CROSS LENGTH ω (um)	40	20	40	42	42	
LOGARITHM	06	90	90	66	66	
REFRECTOR						
f00(MHz)	2216	2216	2216	2124	2124	
LPR	0.55	0.55	0.55	0.55	0.55	
QUANTITY	08	80	80	88	80	

4.

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F I G. 9

CONSTRUCTION OF RECEIVING FILTER

	IDT(S0)	IDT(S2)	IDT(S3)	1DT(P0)	IDT(S0) IDT(S2) IDT(S3) IDT(P0) IDT(P1)	IDT(P2)	IDT(P3)	IDT(P2) IDT(P3) POLARIZED L
f00(MHz)	2436	2436	2436	2340	2340	2340	2340	0.025(nH)
LPR	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
(mn)	30	30	30	33	47	47	33	
LOGARITHM	80	08	80	70	66	66	70	
REFRECTOR								
f00(MHz)	2436	2436	2436	2340	2340	2340	2340	
LPR	0.55	95.0	0.55	0.55	0.55	0.55	0.55	
QUANTITY	80	08	80	80	80	80	80	

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FIG. 10

ATTENUATION CHARACTERISTIC OF THE DUPLEXER

				_	RAN	SMIT	TRANSMITTING FILTER	FILTE	<u>د.</u>			<u>~</u>	ECEL	RECEIVING FILTER	FILT	ER	
	Tx- BRANCHING	Tx- Rx- 1880 1910 1920 1940 1980 2075 2110 2170 1880 1940 1980 2025 2050 2110 2170 BRANCHING BRANCHING (MHz)	1880 (MHz)	1910	1920	1940	1980	2075	2110	2170	1880	1940	1980	2025	2050.	2110	2170
PRIOR ART	0	5.65(mm) 12.8 12 15 1.63 1.4 60 51 61.5 43.8 46.1 55.2 36 33.3 3.10 2.80	12.8	12	15	1.63	4.1	09	51	61.5	43.8	46.1	55.2	36	33.3	3.10	2.80
1st FMBODIMENT	8.75(mm)	1st 8.75(mm) 5.65(mm) 12.8 12 15 1.63 1.4 60 51 61.5 38.8 46 54.4 34.8 32.8 2.33 2.45	12.8	12	15	1.63	1.4	09	51	61.5	38.8	46	54.4	34.8	32.8	2.33	2.45
		STANDERD	30 12 7 2 2 40 45 45 50 50 50 41 26 3 3	12	7	2	2	40	45	45	20	50	20	41	26	က	3

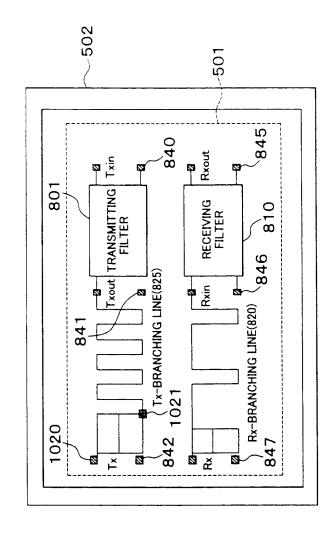


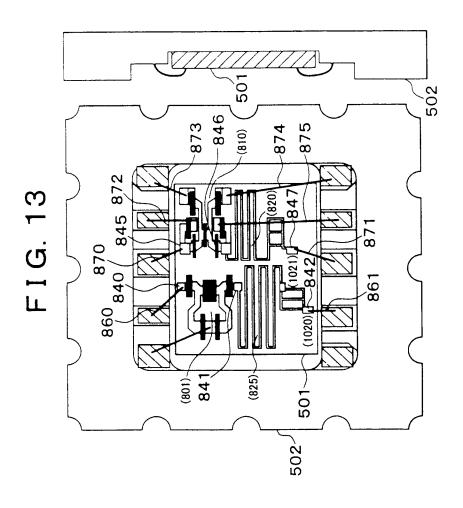
FIG. 11

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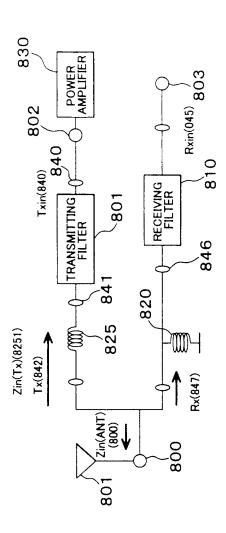
FIG. 12

1020	L102	_
L201	L103	L301
L202	L104	L302

.



F I G. 14 (2nd EMBODIMENT)



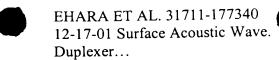


FIG. 15

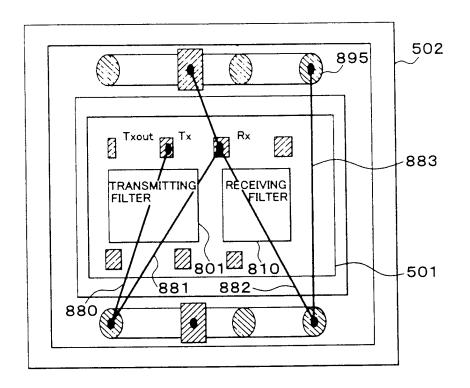


FIG. 16

ATTENUATION CHARACTERISTIC OF THE SAW DUPLEXER OF WIDE BAND CDMA

				_	RAN	SMIT	TRANSMITTING FILTER	FILE	<u>æ</u>			r	RECEIVING FILLER	ZINC		7	
BAND	Tx-	RX-	1880	1910	1920	1940	188019101920194019802075211021701880194019802025205021102170	2075	2110	2170	1880	1940	1980	2025	2050	2110	2170
	DING ING						1			1	1	3	1	6	200	020	2 20
PRIOR	0	5.65(mm) 12.8 12 15 1.63 1.4 60 51 61.5 43.8 46.1 55.2 30 53.3 5.00 5.25	12.8	12	5	1.63	4.	8	2	61.5	8.8	46.1	2.66	99	55.5	0.00	5.63
				!	,	000	;	6	ŭ	21.5	0 0 0	46	5.4.4	34 B	328	2 33	2 45
1st	8.75(mm)	8.75(mm) 5.65(mm) 12.8 12 13 1.03 1.4 00 31 01.3 30.3 1.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0	12.8	71	2	20.	4.	3			0.00	ř	;	2	}	i	
								T					9	3	,	000	000
2st	3.2(nH)	3.2(nH) 1.8(nH) 12.9 12 14.8 1.62 1.94 73.8 55.6 58.5 42.4 41.6 49.7 31 31.2 3.03 2.34	12.9	12	14.8	1.62	1.94	73.8	55.6	58.5	42.4	9.14	49.7	5	31.2	3.03	76.7
EMBODIMENT	SERIAL	PARALLEL														Ţ	,
		STANDARD	30	12	_	2	30 12 7 2 2 40 45 45 50 50 50 41 26 3 3	40	45	45	20	20	20	4	26	2	2
	::;		,	!					1	-							

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FIG. 17

ATTENUATION CHARACTERISTIC OF THE SAW DUPLEXER

				_	RANS	FIMS	TRANSMITTING FILTER	-ILTE	<u>~</u>			œ	ECEL	VING	RECEIVING FILTER	۳.	
BAND	Tx- BRANCHING	Tx- BRANCHING BRANCHING	1880	1910	1920	1940	1880 1910 1920 1940 1980 2075 2110 2170 1880 1940 1980 2025 2050 2110 2170	0752	1102	0.11	1880	1940	1980	2025	2050	2110	2170
PRIOR	0	5.65(mm) 12.8 12 15 1.63 1.4 60 51 61.5 43.8 46.1 55.2 36 33.3 3.10 2.80	12.8	12	15	1.63	4.1	09	21	61.5	43.8	46.1	55.2	36	33.3	3.10	2.80
2st EMBODIMENT	3.2(nH) SERIAL	1.8(nH) 12.9 12 14.8 1.62 1.94 73.8 55.6 58.5 42.4 41.6 49.7 31 31.2 3.05 2.78 PARALLEL	12.9	12	14.8	1.62	1.94	73.8	55.6	58.5	42.4	41.6	49.7	31	31.2	3.05	2.78
	ST	STANDARD	30	12	7	2	30 12 7 2 2 40 45 45 50 50 50 41 26 3 3	40	45	45	50	50	20	4	26	3	3

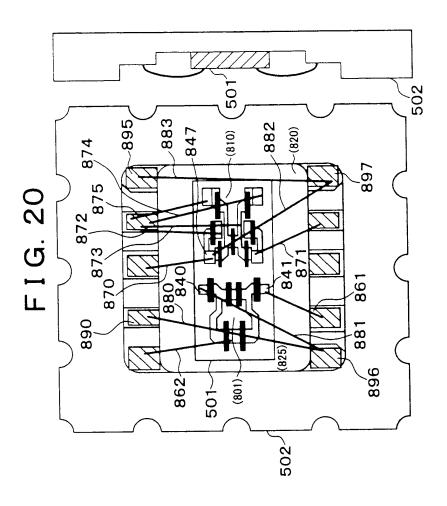
FIG. 18

SPECIFIC RESISTANCE

MATERIAL	SPECIFIC RESISTANCE	MATERIAL	SPECIFIC RESISTANCE
1(Au)	1.416	5(PLATINUM)	6.16
2(AI)	1.64	6(TUNGSTEN)	3.25
3(Cn)	-	7(TITANIUN)	47.8

FIG. 19

1 1 4 4 4 4 C 1 4			S	SHAPE OF INDUCTOR(Unit:cm)	INDOC	TOR(U	nit:cm)				
	RIAL	I	*	NO MATERIAL H W LENGTH				INDUCT(nH)	INDUCT(nH) SPECIFIC RESISTANCE	o	Q RESISTANCE
								i		000	.,,
1 Au		0.03	0.03	0.1	1.667	0.511	1.838	Au 0.03 0.03 0.1 1.667 0.511 1.838 0.93369	1.416 48.66 0.117	48.66	0.11/
2 Au		0.03	0.03	0.158	2.6333	0.9684	2.2462	Au 0.03 0.03 0.158 2.6333 0.9684 2.2462 1.80291	1.416	59.47	1.416 59.47 0.095722
A Au		0 03	0.03	0.2395	3.9917	1.3844	2.6333	Au 0.03 0.03 0.2395 3.9917 1.3844 2.6333 3.20388	1.416	69.719	1.416 69.719 0.08165



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FIG. 21

(3rd EMBODIMENT)

